## REMARKS

The present invention is a process for controlling selection of a modulation coding selection method to be used by a base transceiver station 10 to transmit data packets comprising first data packets transmitted on the forward channel which have been received by a mobile station and second data packets to be transmitted to the mobile station on the forward shared channel which follow the first data packets. The process includes storing information at the base transceiver station with the information containing modulated and coding methods which may be selected to transmit the second data packets over the forward shared channel to the mobile station. See paragraph [0021] for a discussion of the transmission of data packets on the shared forward channel and modulation and coding selection methods from selectable groups. Feedback is received from the mobile station at the base transceiver station based upon transmission of the first data packets which includes a quality indication of transmission over the forward channel to the mobile station. See paragraph [0023] for a description of feedback. A modulation and coding method is selected from a plurality of modulation and coding selection methods to be used to transmit the second data packets on the forward channel dependent on the received quality indication of the feedback of the first data packets. The quality indication is processed at the base transceiver station to choose from a plurality of groups of selectable modulation and coding methods 502 and 504 a modulation and coding method to be used to transmit the second data packets from one of the groups which optimizes a characteristic of the transmission of the second data packets which may be frame error rate or throughput. See paragraphs [0025] and [0033] for a description of the optimal modulation encoding selection process.

Triggers 212 or 214 from the compute throughput matrix metric of Fig. 3 are utilized to select one of the modulation and coding methods which optimize either characteristic of throughput trigger or frame error rate. This process provides optimization of transmission of data packets from a base transceiver station on a forward shared channel to at least one mobile station.

The specification and claims stand objected to as set forth respectively in Sections 1 and 2 of the Office Action. The Examiner is thanked for pointing out the informalities which have been corrected by the present amendment.

Claim 1 stands rejected under 35 U.S.C. §102(e) as being anticipated by United States Patent 6,567,375 (Balchandran et al). This ground of rejection is traversed with respect to claim 1. Balchandran et al differ from claim 1 in several aspects. In the first place, claim 1 recites, "receiving feedback from the mobile station at the base transceiver station based upon transmission of the first data packets of a quality indication of transmission of the first data packets over the forward channel to the mobile station." Balchandran et al is based upon simulation to choose the selection of modulation and coding schemes which is not feedback. See column 5, lines 26-49. Moreover, Balchandran et al do not disclose the claimed processing of the quality indication at the base transceiver station which is used to choose from a plurality of groups of selectable modulation and coding methods a modulation and coding method to be used to transmit the second data packets from one of the groups with optimizes a characteristic of the transmission of the second data packets. There is no basis why a person of ordinary skill in the art would be led to modify the teachings of Balchandran et al to arrive at the subject matter of claim 1

including the foregoing differences. The only basis to arrive at the subject matter of claim 1 would be impermissible hindsight.

Claims 1-6 stand rejected under 35 U.S.C. §103 as being anticipated by United States Patents 6,400,699 (Airy et al). This ground of rejection is traversed for the following reasons. Airy et al disclose a transmission scheduler for a multiple antenna wireless cellular network. Scheduling decisions are made for the downlink transmission. See column 5, lines 42-59. Moreover, Airy et al disclose mode assignment providing information regarding the type of modulation and coding to be used when providing data blocks of the service flow request which is generally determined by quality of the transmission link between the base station transceiver and the subscriber units. See column 10, lines 35-64. However, Airy et al do not disclose the selection of a modulation and coding method from a plurality of modulation encoding methods wherein the selection is based upon a quality indication being processed by the base transceiver station to choose from a plurality of groups of selectable modulation and coding methods a modulation and coding method to be used to transmit the second data packets from one of the groups which optimizes a characteristic of the transmission of the second data packets.

Moreover, newly submitted claim 57 further limits claim 1 by reciting a process comprising processing the quality indication at the transceiver station to provide multiple triggers which are a function of the quality indication and using the multiple triggers to select a single group of the plurality of groups of selectable modulation and coding methods from which the modulation and coding method used to transmit the second data packets is selected. There is no disclosure of any use of

triggers to select a group from one of the groups with the groups respectively optimizing a different characteristic of transmission of the second data packets.

There is no basis in the record why a person of ordinary skill in the art would be led to modify the teachings of Airy et al to arrive at the subject matter of the rejected claims.

Claims 7-10 and 56 stand rejected under 35 U.S.C. §103 as being unpatentable over Airy et al in view of United States Patent 6,035,210 (Endo et al). Endo et al has been cited for the disclosure of a forward channel error measuring device for measuring a frame error rate of the forward channel radio signals from the radio base station so as to report it as a forward channel frame error rate to the radio base station. However, it should be noted that the usage by Endo et al of measuring a frame error rate in the forward channel is for purposes of power control which is not relevant to a selection of modulation and coding methods as recited in the claims. It is submitted that the Examiner's suggestion of the combination of the measuring of a frame error rate in the forward channel in Endo et al with Airy et al is based upon impermissible hindsight use of the Applicants' disclosure. There is no basis why a person of ordinary skill in the art would be led to combine the teachings of Airy et al and Endo et al given the respective difference in the use of frame error rate to selection of modulation and coding methods and power control.

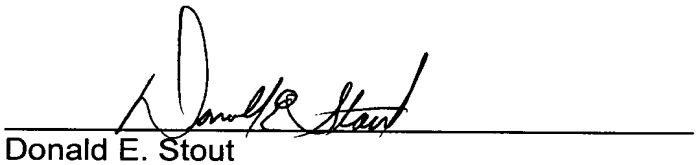
Claims 35 and 36 stand rejected under 35 U.S.C. §103 as being unpatentable over Airy et al in view of WO 03/010984. Zhang et al does not cure the deficiencies noted above with respect to Airy et al.

In view of the foregoing amendments and remarks, it is submitted that each of the claims in the application is in condition for allowance. Accordingly, early allowance thereof is respectfully requested.

To the extent necessary, Applicants petition for an extension of time under 37 C.F.R. §1.136. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account No. 01-2135 (730.39974X00) and please credit any excess fees to such Deposit Account.

Respectfully submitted,

ANTONELLI, TERRY, STOUT & KRAUS, LLP



Donald E. Stout
Registration No. 26,422
(703) 312-6600

Attachments

DES:dlh